

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-9. (canceled).

10. (Currently Amended)

A speech signal decoding apparatus characterized by comprising:
a plurality of decoding means for decoding information containing at least a sound source signal, a gain, and filter coefficients from a received bit stream;
identification means for identifying voiced speech and unvoiced speech of a speech signal using the decoded information;

smoothing means for performing smoothing processing based on the decoded information for at least either one of the decoded gain and the decoded filter coefficients in only the unvoiced speech identified by said identification means; and

means for obtaining an excitation signal by multiplying the decoded sound source signal by the decoding gain after performing the smoothing processing; and
means for decoding the speech signal by driving a filter having filter means which has the decoded filter coefficients by the excitation signal obtained from the means for obtaining, and is driven by an excitation signal obtained by multiplying the decoded sound source signal by the decoded gain, at least either one of the decoded filter coefficients and the decoded gain using an output result of said smoothing means.

11. (Original) An apparatus according to claim 10, wherein
said apparatus further comprises classification means for classifying unvoiced speech in accordance with the decoded information, and

said smoothing means performs smoothing processing in accordance with a classification result of said classification means for at least either one of the decoded gain and the decoded filter coefficients in the unvoiced speech identified by said identification means.

12. (Original) An apparatus according to claim 10, wherein said identification means performs identification operation using a value obtained by averaging for a long term a variation amount based on a difference between the decoded filter coefficients and their long-term average.

13. (Original) An apparatus according to claim 11, wherein said classification means performs classification operation using a value obtained by averaging for a long term a variation amount based on a difference between the decoded filter coefficients and their long-term average.

14. (Original) An apparatus according to claim 10, wherein
 said decoding means decodes information containing pitch periodicity and a power of the speech signal from the received bit stream, and
 said identification means performs identification operation using at least either one of the decoded pitch periodicity and the decoded power output from said decoding means.

15. (Original) An apparatus according to claim 11, wherein
 said decoding means decodes information containing pitch periodicity and a power of the speech signal from the received bit stream, and
 said classification means performs classification operation using at least either one of the decoded pitch periodicity and the decoded power output from said decoding means.

16. (Original) An apparatus according to claim 10, wherein
said apparatus further comprises estimation means for estimating pitch
periodicity and a power of the speech signal from the excitation signal and the decoded
speech signal, and

 said identification means performs identification operation using at least either
one of the estimated pitch periodicity and the estimated power output from said estimation
means.

17. (Original) An apparatus according to claim 11, wherein
said apparatus further comprises estimation means for estimating pitch
periodicity and a power of the speech signal from the excitation signal and the decoded
speech signal, and

 said classification means performs classification operation using at least either
one of the estimated pitch periodicity and the estimated power output from said estimation
means.

18. (Original) An apparatus according to claim 11, wherein said classification
means classifies unvoiced speech by comparing a value obtained by the decoded filter
coefficients from said decoding means with a predetermined threshold.

19. (Canceled)

20. (Currently Amended) A speech signal decoding/encoding apparatus
characterized by comprising:

 speech signal encoding means (Fig. 3) for encoding a speech signal by
expressing the speech signal by at least a sound source signal, a gain, and filter coefficients;

a plurality of decoding means for decoding information containing a sound source signal, a gain, and filter coefficients from a received bit stream output from said speech signal encoding means;

identification means for identifying voiced speech and unvoiced speech of the speech signal using the decoded information;

smoothing means for performing smoothing processing based on the decoded information for at least either one of the decoded gain and the decoded filter coefficients in only the unvoiced speech identified by said identification means; and

means for obtaining an excitation signal by multiplying the decoded sound source signal by the decoding gain after performing the smoothing processing; and

means for decoding the speech signal by driving a filter having filter means which has the decoded filter coefficients by the excitation signal obtained from the means for obtaining, and is driven by an excitation signal obtained by multiplying the decoded sound source signal by the decoded gain, at least either one of the decoded filter coefficients and the decoded gain using an output result of said smoothing means.